REVIEW

ROADSIDE FLOWERS OF TEXAS. Paintings by Mary Motz Wills, text by Howard S. Irwin. 295 pp. University of Texas Press, Austin. 1961. \$5.75

Texas' botanical wealth has never received the attention it deserves, aesthetically or scientifically or even commercially. But there are signs of improvement. This book has a fly-leaf announcement signed by the President of the University of Texas, and the Humble Oil and Refining Company recently offered it at a reduced price to credit-card holders. Like several predecessors (Whitehouse's Texas Flowers in Natural Colors, Schulz's (Mrs. Quillin's) Texas Wild Flowers, Casey's 101 American Wild Flowers), it provides illustrations of a selection of the many flowering plants found wild in the state. It goes beyond any predecessor in having a text supplied by a botanist who makes a serious effort to provide notes on a broad sample and includes keys to those illustrated.

Primary basis for the book is a group of watercolor paintings by Mary Motz Wills of Abilene. Most of them do not depict whole plants, but small portions, such as one might have gathered for a miscellaneous bouquet on a casual walk. The impression of fragmentariness is accentuated by their having been reduced to fit four on a page. The scale varies greatly, at times to a misleading degree. The huge trumpets of Datura Wrightii appear little larger than the blossoms of Heliotropium convolvulaceum on the facing page, whereas the former are actually nearly ten times as large as the latter. The medium of watercolor does not lend itself well to depicting such botanically significant features as hairs on stem or leaves; the illustration labelled Astragalus mollissimus is hardly recognizable as that densely hairy plant. But the paintings were not made with the expectation of publishing them in a book, especially in association with technical botanical information, so criticism from such a technical viewpoint is really not fair. The pictures will be quite serviceable aids to the recognition of many common wild flowers of Texas, and that after all is the chief purpose of the book.

Following the 64 pages of illustrations are 185 pages of keys and descriptions, with brief notes on additional species related to those illustrated, information on distribution within the state, and items of special interest. Compiling all this for a state which had no complete published flora and not even an up-to-date checklist was no small task. When one recalls that the author of the text was at the time only a graduate student, and a newcomer to Texas to boot, it must be acknowledged a really amazing performance. Three pages of line drawings to illustrate botanical terms, a glossary, and separate indexes for common and scientific names conclude the book.

In an introductory "Note to the Amateur Botanist," Dr. Irwin addresses hopefully "the intelligent lay botanist who is interested in enlarging his knowledge of the flora around him," and who is willing to tackle botanical keys and botanical terminology. If my experience with my Spring Flora of the Dallas-Fort Worth Area is any indication, he is addressing some exceedingly rare animals.\(^1\) The self-discipline and patient effort needed for the pursuit of Linnaeus's "harmless science" are simply out of tune with the spirit of the region. If you want to get something done, you throw your weight around or you throw your money around and expect results in a hurry. In this part of the world, things that can't be handled that way aren't worth bothering with. Still there are always just a few freaks or misfits who are willing to attempt a little cultivation of mind. For them especially this combination of attractive colored illustrations and a well-done, serious, technically respectable (but still quite elementary) text should prove a boon.

With no desire whatever to belittle Dr. Irwin's achievement, it has to be stated that some of the illustrations cannot be positively identified, because too incomplete or not showing certain important technical details, and a number of others have names attached to them which are definitely not the correct ones. Perhaps the originals are sufficiently superior to the reproductions to allow more confident identifications. To my eye, at least, the illustrations designated as Iris hexagona, Mirabilis nyctaginea (as nyctagineus), Lepidium virginicum, Brassica juncea, Draba platucarpa, Astragalus mollissimus, Castilleja latebracteata, C. indivisa, Plantago Helleri, Liatris punctata, Gutierrezia dracunculoides, Solidago nemoralis, S. altissima, Aster oblongifolius, A. praealtus (as prealtus), A. subulatus var. ligulatus, Senecio plattensis, and Pyrrhopappus multicaulis are not positively identifiable as those species, and I am unable to state with certainty what they are. The names listed below are definitely not correct; when possible I have given what I believe to be the correct names in capital letters.

PLATE 1. Sagittaria latifolia. S. LONGILOBA. Projecting leaf-bases distinctly longer than the apical portion.

PLATE 3. Yucca Treculeana. The whole plant at left may be this species, though the leaves seem too narrow. The portion of inflorescence at right definitely is not; it may be Y. ARKANSANA or Y. ANGUSTI-

¹ Not a single book store within the area of the Spring Flora regularly carries it in stock, and only three have ever ordered it, one of these just one copy in the more than 6 years since its publication. When the garden editor of a major newspaper asked that a copy be purchased for the paper's reference library, the request was refused. In all fairness, it should be mentioned that the Dallas Public Library has purchased a total of 17 copies. But public demand for the book in an area making loud claims to cultural superiority is hardly impressive. Even sales for use in teaching go overwhelmingly to cities outside the area, some of them several hundred miles away. No copy has every been sold for this purpose in Fort Worth, and the only such sales in Dallas in more than a year have been at the high school level.

FOLIA.—Yucca arkansana. The whole plant at left is probably Y. PALLIDA or its close relative Y. RUPICOLA. The portion of inflorescence at right I do not recognize.

Plate 11. Clematis reticulata. C. PITCHERI. The former has thick, stiff, heavily veiny leaf blades.

PLATE 26. Viola missouriensis. V. VILLOSA. The leaf-blades of V. missouriensis are triangular-pointed and its flowers are definitely on the blue side.

PLATE 33. Asclepias oenotheroides. A. LATIFOLIA. A. oenotheroides has petioled leaves.

PLATE 39. Verbena pumila. V. TENUISECTA. The flowers of V. pumila are extremely small and are not elevated on naked peduncles in the manner shown.

PLATE 41. Brazoria scutellarioides. SCUTELLARIA RESINOSA. The Erazoria is annual, with a very slender taproot, and the flowers are smaller and paler.

PLATE 42. Salvia farinacea. S. AZUREA var. GRANDIFLORA. In S. farinacea the calvx is white-woolly.

PLATE 55. Aster laevis. Not identifiable. This species is northern and does not occur in or near Texas.

PLATE 56. Aster sagittifolius, A. TEXANUS. The former also is a northern species not known from Texas.

PLATE 59. Thelesperma simplicifolium. Probably HELENIUM BAD-IUM. The Thelesperma has a rather flat, yellow center to the head.

PLATE 61. Helenium latifolium. H. FLEXUOSUM. The former (usually referred to H. autumnale) also has heads with yellow center.

PLATE 64. Krigia virginica Not too accurately depicted but almost certainly K. OCCIDENTALIS, with shorter pappus in proportion to the body of the achene (which is partially obscured by the pappus scales in the illustration).

In one case there is discord between the common name and the Latin one: "Old Plainsman" for Hymenopappus artemisiaefolius. This is mainly an East Texas species, not one of the prairies or plains, though it has relatives occurring there.—Lloyd H. Shinners.